

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method ~~for detecting spam~~, comprising:
identifying ~~normal~~ real users visiting a web site; and
determining an occurrence of spamming on the web site based at least in part on the identified ~~normal~~ real users.
2. (currently amended) The method of claim 1 wherein the identifying ~~normal~~ real users includes:
tracking activities of users visiting the web site, and
identifying the real users based at least in part on the tracked activities.
3. (original) The method of claim 2 wherein the tracking activities includes:
determining whether the users load images.
4. (original) The method of claim 2 wherein the tracking activities includes:
determining whether the users have javascript turned on.
5. (original) The method of claim 2 wherein the tracking activities includes:
determining a type of browser used by the users.

6. (original) The method of claim 2 wherein the tracking activities includes:
determining an interval at which each of the users visits the web site.
7. (original) The method of claim 2 wherein the web site is a search engine,
and
wherein the tracking activities includes:
determining a type of items for which searches are performed by
the users.
8. (original) The method of claim 2 wherein the tracking activities includes:
tracking activities of users visiting another web site.
9. (original) The method of claim 2 wherein each of the users is associated
with a cookie identifier, and
wherein the tracking includes:
using the cookie identifiers to track the activities of the users.
10. (currently amended) The method of claim 1 wherein each of the users is
associated with a cookie identifier, and
wherein the identifying ~~normal~~ real users includes:

identifying ~~normal~~ real users based at least in part on an age of the cookie identifiers associated with the users.

11. (currently amended) The method of claim 1 wherein each of the users is associated with a network address, and

wherein the identifying ~~normal~~ real users includes:

identifying the ~~normal~~ real users based at least in part on the network addresses associated with the users.

12. (currently amended) The method of claim 1 wherein the web site includes at least one advertisement, and

wherein the determining an occurrence of spamming includes:

determining a click rate of the at least one advertisement for the identified ~~normal~~ real users, and

determining that the at least one advertisement has been spammed when the click rate of users visiting the web site exceeds the determined click rate for the identified ~~normal~~ real users.

13. (original) The method of claim 12 wherein the click rate includes a range of click rates.

14. (currently amended) The method of claim 1 wherein the web site includes at least one advertisement,

wherein the identifying includes:

determining a percentage of a number of users visiting the web site in a time period that are ~~normal~~ real users, and

wherein determining an occurrence of spamming includes:

estimating a percentage of ~~normal~~ real users selecting the at least one advertisement during the time period to be approximately the percentage of ~~normal~~ real users visiting the web site during the time period, and

determining that the at least one advertisement has been spammed when an actual percentage of ~~normal~~ real users selecting the at least one advertisement during the time period is lower than the estimated percentage of ~~normal~~ real users selecting the at least one advertisement during the time period.

15. (original) The method of claim 1 wherein the determining includes:

determining an occurrence of spamming of at least one advertisement on the web site, and

wherein the method further comprises:

providing a refund in response to determining that the at least one advertisement has been spammed.

16. (currently amended) A system for ~~detecting click spam at a web site~~, comprising:

means for identifying ~~normal~~ real users visiting a web site; and

means for determining an occurrence of click spamming on the web site based at least in part on a behavior of the identified ~~normal~~ real users visiting the web site.

17. (currently amended) A computer-readable ~~medium~~ memory device containing instructions for controlling at least one processor to perform a method for detecting click spamming of an advertisement on a server, the method comprising:

determining a number of ~~normal~~ real users accessing the server;

determining a percentage of the ~~normal~~ real users clicking the advertisement when the advertisement is displayed to the ~~normal~~ real users; and

determining whether the advertisement has been click spammed based at least in part on the determined percentage.

18. (currently amended) A server comprising:

a memory configured to store at least one advertisement; and

a processor configured to:

cause the at least one advertisement to be ~~displayed~~ presented,

determine a number of ~~normal~~ real users accessing the server,

determine a percentage of the ~~normal~~ real users clicking the at least one advertisement, and

determine whether the advertisement has been click spammed based at least in part on the determined percentage.

19. (currently amended) A method ~~for determining whether an item on a web site has been click spammed~~, comprising:

identifying a group of ~~normal~~ real users visiting the web site;
determining a click rate of the item for the group of ~~normal~~ real users; and
determining whether the item has been click spammed based at least in part on the determined click rate for the ~~normal~~ real users.

20. (currently amended) The method of claim 19 further comprising:
determining a total number of users visiting the web site, and
wherein the determining whether the item has been click spammed includes:

comparing the determined click rate for the ~~normal~~ real users to a click rate for the total number of users visiting the web site, and

determining that the item has been click spammed when the click rate for the total number of users exceeds the determined click rate for the ~~normal~~ real users.

21. (currently amended) The method of claim 19 wherein the identifying includes:

tracking an activity of users visiting the web site, and
identifying the group of ~~normal~~ real users based at least in part on the tracked activity.

22. (previously presented) The method of claim 21 wherein the tracking includes determining, for each user, at least one of whether the user loads images, an age of a cookie associated with each user, whether the user has javascript turned on, a type of browser used by the user, or an interval at which the user visits the web site.

23. (original) The method of claim 19 further comprising:
taking remedial measures in response to determining that the item has been click spammed.

24. (currently amended) The method of claim 19 wherein the determining a click rate of the item for the group of ~~normal~~ real users includes:
estimating a percentage of ~~normal~~ real users visiting the web site, and
setting a percentage of clicks of the item from ~~normal~~ real users to approximately equal the estimated percentage.

25. (currently amended) The method of claim 24 wherein the determining whether the item has been click spammed includes:

determining whether an actual click rate of the item for the group of ~~normal~~ real users differs from the set click rate.

26. (currently amended) The method of claim 19 wherein the determining a click rate of the item includes:

determining different click rates of the item for the group of ~~normal~~ real users, the different click rates corresponding to different time periods.

27. (original) The method of claim 26 wherein the different time periods include different times of a day or week.

28. (original) The method of claim 26 wherein the different time periods include different months of a year.

29. (currently amended) A computer-readable ~~medium~~ memory device containing instructions for controlling at least one processor to perform a method for detecting a spamming of an advertisement displayed by a server, the method comprising:

identifying ~~normal~~ real users visiting the server;

determining a click rate of the advertisement for the ~~normal~~ real users; and

determining whether the advertisement has been spammed based at least in part on the determined click rate for the ~~normal~~ real users.

30. (original) A server comprising:

a memory configured to store at least one item; and

a processor configured to:

cause the at least one item to be displayed,

identify a number of normal users accessing the server,

compare the number of normal users to a total number of users to obtain a percentage,

set a click rate of the at least one item based at least in part on the percentage, and

determine whether the at least one item has been spammed based at least in part on the click rate.

31. (currently amended) A method ~~for identifying normal users visiting a web site,~~ comprising:

tracking activities of users visiting the web site, the tracking including determining, for each user, at least one of whether the user loads images, an age of a cookie associated with each user, whether the user has javascript turned on, a type of browser used by the user, or an interval at which the user visits the web site; and

identifying ~~normal~~ real users based at least in part on the tracked activities.